

## REMARKS

### **I. Status of the Subject Application**

Claims 41-50 are pending in the subject application and stand rejected. Claim 51 is deemed withdrawn. Claim 47 has been amended to provide antecedent support for a term therein.

### **II. Objection To The Title**

The Official Action indicated that “the title of the invention is not descriptive”. The Title was previously objected to in an Official Action dated February 1, 2002. In Applicant’s response of April 4, 2002, Applicant amended the Title to read: METHODS FOR ALIGNING AN ANTENNA WITH A SATELLITE. A copy of Applicant’s April 4, 2002 Amendment is enclosed. The subsequent Official Action issued in response to Applicant’s April 4, 2002 failed to object to that Title. Applicant submits that the Title as previously amended is sufficiently descriptive of the disclosure and hereby traverses this objection.

### **III. Objection to the Drawings**

The Official Action provided that “[t]he drawings must show every feature of the invention specified in the claims. Therefore, the claimed ‘a planar attachment portion’ (claim 41); ‘structure’ claim (46); must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.” Responsive to this objection Applicant respectfully submits the following comments:

a. **“Planar Attachment Portion”**

The subject application as originally filed provides:

In an alternative embodiment as shown in Figures 3A, 22A, and 23A, the holes (82, 84, 90) are formed in a **planar attachment portion 99** that is integrally formed with the rear surface of the reflector 30.

Lines 12-14, page 27 (emphasis added). Thus, examples of a planar attachment portion are

shown in Figures 3A, 22A and 23A as originally filed. Accordingly, Applicant traverses this rejection.

b. **“A structure”**

The subject application as originally filed provides:

To use this embodiment of the mounting bracket 100 of the present invention, the mounting member 110 is attached to a support member such as a wall, tree, support mast, etc. For example, as illustrated in Figure 15, the mounting member 110 may be attached to a vertically extending portion 262 of a building or 260 or other structure by mounting screws 264.

Page 22, line 22-page 23, line 3 of the subject application as originally filed. The structure may comprise, for example, a portion of a building (Figure 15), a tree (Figure 16), a mast (Figure 17). Accordingly, Applicant traverses this rejection.

**IV. The Rejections Under 35 U.S.C. § 112**

Claims 41-45 and 46-50 were rejected under 35 U.S.C. § 112, second paragraph, “as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.” The Official Action further provided that “[t]he [sic] recites ‘attaching a compass to the planar attachment portion’ (claims 41 and 46) appear to be incorrect because there are [sic] no compass being associated thereof and the specification do [sic] not

disclose such connection.”

Responsive to this rejection Applicant respectfully submits that the subject application as originally filed provides:

In one embodiment, housing 330 supports a conventional digital **compass** 340 that has a digital display. Digital **compasses** are known in the art and, therefore, the manufacture and operation thereof will not be discussed in great detail herein. For example, a digital **compass** of the type used in conventional surveying apparatuses, including that apparatus manufactured by Bosch could be successfully employed.

Page 28, lines 6-10 of the subject application as originally filed (emphasis added). The subject application further discloses that the housing 330 is attached to a mounting base 310. See page 27, line 20-page 28, line 15 of the subject application as originally filed. The subject application \* further provides that the planar attachment portion may have holes 82, 84, 90 formed therein.

Page 27, lines 10-14 of the subject application as originally filed. On page 29, line 19-page 30, line 17 of the subject application as originally filed, an example is given concerning how the mounting base may be attached to the planar attachment portion. The subject application further provides that:

The antenna alignment apparatuses of the present invention may comprise one or more of the following components: (i) digital **compass**, (ii) a first digital level, (iii) a second digital level, and/or (iv) a speaker. For example as shown in Figure 29, the antenna pointing device 400 is substantially identical to the antenna pointing device described above, except that device 400 only includes an azimuth meter that consists of a digital **compass** 442.

Page 36, lines 11-15 of the subject application as originally filed (emphasis added). The subject application further provides:

Figures 33-35 illustrate another embodiment of the present invention. In that embodiment, the antenna pointing apparatus 800 includes a housing 810 that supports an analog **compass** 820 and an analog level therein.

Page 37, lines 14-16 of the subject application as originally filed (emphasis added). Applicant

submits that the subject application provides ample examples of attaching a compass to the planar attachment portion. Applicant further submits that the above-mentioned passages are provided as examples and are not meant in any way to limit the scope of equivalent structures and methods to which the claims are entitled to encompass.

The Official Action further stated that “[I]t is not clear what [is] being claimed as ‘a structure’ (claim 46, line 3).” As was discussed above, various examples of structures are disclosed in the subject application as originally filed – i.e., building, tree, mast, etc. Accordingly, Applicant traverses this rejection.

The Official Action further states that “ ‘...said moving (claim 47, line 2) lacks antecedent basis.” Applicant submits that claim 47 has been amended to change “after said moving” to “after said locking”.

#### **V. The Rejections Under 35 U.S.C. § 103**

Claims 41 and 46 were rejected under 35 U.S.C. 103 as being unpatentable over U.S. Patent No. 5, 977, 922 to Hemmingsen II in view of U.S. Patent No. 6,188,372 to Jackson et al. In particular, the Official Action acknowledges that Hemmingsen II fails to disclose defining a planar attachment portion on a rear surface of the antenna reflector. However, the Official Action further asserts that “Jackson et al. teach the defining the planar attaching portion on a rear surface of the antenna reflector such that the planar attachment portion includes a plane that is substantially perpendicular to a centerline axis 26 of the antenna reflector (see Figs. 1-3b, col. 3, lines 35-46). Therefore, it would have been obvious to one having skill in the art to employ the teaching of defining a planar attachment portion on a rear surface of the antenna reflector such

that the planar attachment portion includes a plane that is substantially perpendicular to a centerline axis of the antenna reflector as taught by Jackson et al. as so to facilitate the aligning assembly process.”

The MPEP outlines the requirements for establishing a *prima facie* case of obviousness based on a modification to a prior art reference. First, the mere fact that a reference can be modified or combined with other references is not sufficient to establish *prima facie* obviousness. MPEP §2143.01. The prior art must suggest the desirability of such modification or combination. *Id.*

Applicant submits that the Examiner correctly notes that Hemmingsen fails to disclose the action of attaching a compass to the **rear** of the antenna. Furthermore, as was discussed above, the bracket disclosed in Hemmingsen is specifically designed to be suspended from the **support arm** to function as an inclinometer to indicate the angle of the **support arm** with respect to the horizontal. Jackson et al. discloses an integral polarity plate mounted on the backside of the antenna reflector. As can be seen in Figures 3a and 7b of Jackson et al., the mounting bracket attaches to the polarity plate. The Official Action fails to point to any motivation in the prior art that would have led the person of ordinary skill in the art to vastly modify the Jackson et al. polarity plate and bracket arrangement to enable the compass to be attached to the polarity plate. Accordingly, Applicant submits that a *prima facie* case of obviousness has not been established with respect to claims 41 and 46.

The Official Action further rejected claims 42, 43, and 47-48 under 35 U.S.C. § 103(a) as being unpatentable over Hemmingsen II in view of Jackson et al. Claims 42 and 43 depend from claim 41 and claims 47-48 depend from claim 46. Because a *prima facie* case of obviousness has

not been established with respect to independent claims 41 and 46 for at least the abovementioned reasons, without acquiescing to any specific statement in the Official Action regarding claims 42, 43, 47 and 48, it follows that these dependent claims are patentable over Hemmingsen II and Jackson et al. for the same reasons.

Claims 44, 45, 49 and 50 were rejected under 35 U.S.C. § 103 as being unpatentable over Hemmingsen II in view of Jackson et al. and further in view of U.S. Patent No. 5,647,134 to Chou ("Chou"). In particular, the Official Action provided "[a]s applied to claims 44 and 49, Hemmingsen II or Jackson et al. does not teach the compass has at least one pin and the pin being coupled to the associated socket formed in the planar attachment portion. Chou teaches the compass 20 having pin 24 being coupled to an associated socket 14 of the antenna reflector 10. Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize the compass has [sic] at least one pin and the pin being coupled to the associated socket formed in the planar attachment portion as taught by Chou, efficiency of the operations would result."

Responsive to this rejection, Applicant respectfully submits that the Examiner is improperly using the claimed invention as an instruction manual or template to piece together the teachings of the prior art so as to render the claimed invention obvious. See *In re Fritch*, 23 USPQ2d 1780 (Fed. Cir. 1992). Applicant further submits that Section 2143.01 of the MPEP provides that a "proposed modification cannot change the principle of operation of a reference. See also *In re Ratti*, 2070 F.2d 810 (CCPA 1995)(the court reversed the rejection holding that the suggested combination of references would require substantial reconstruction and redesign of the elements shown in the primary reference as well as change in the basic principle under which the

primary reference construction was designed to operate). As indicated above, the mounting bracket that supports the antenna of Jackson et al. is directly attached to the polarity plate. If one were to modify the Jackson et al. arrangement so that the compass of either Jackson et al. or Chou attaches to the polarity plate an entirely different mounting bracket and support arrangement would have to be designed to support the Jackson et al. antenna. Furthermore, Hemmingsen II discloses that the compass may be removably suspended from the support arm. Chou discloses attaching the compass to the periphery of the antenna. The Official Action fails to point to any teaching in the relied upon prior art that would disclose why it would be advantageous to attach the compass to the polarity plate. Accordingly, Applicant respectfully submits that a *prima facie* case of obviousness has not been established with respect to claims 44, 45, 49 and 50.

Claim 49

#### **VI. Supplemental Information Disclosure Statement**

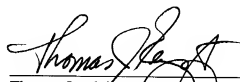
Applicant is submitting herewith a Supplemental Information Disclosure Statement and a check in the amount of \$180. Consideration of the references cited in this Statement is requested.

#### **VII. Conclusion**

In sum, Applicant respectfully submits that all of the pending claims are in condition for allowance. Applicant has made a diligent effort to respond to the rejections presented in the Official Action. Accordingly, reconsideration and withdrawal of such rejections and passage to allowance of all the pending claims are earnestly solicited. If the Examiner has any remaining

concerns regarding the patentability of any of the pending claims, he is invited to contact the undersigned at the telephone number set forth below so that such concerns may be expeditiously addressed.

Respectfully submitted,

  
\_\_\_\_\_  
Thomas J. Edgington  
Registration No. 34,324  
Attorney for Applicant

Kirkpatrick & Lockhart LLP  
Henry W. Oliver Building  
535 Smithfield Street  
Pittsburgh, Pennsylvania 15222

(412) 355-8303



Serial No. 09/751,278

**Version With Markings Showing Changes Made**

**In the Claims**

Please amend claim 47 as follows:

47. (Amended) The method of claim 46 further comprising detaching the compass from the planar attachment portion of the antenna reflector, after said [moving] locking.